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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,849	02/18/2004	Masayuki Yoneyama	101201-00023	9458

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EXAMINER

APPIAH, CHARLES NANA

ART UNIT PAPER NUMBER

2686

DATE MAILED: 02/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/779,849

Applicant(s)

YONEYAMA ET AL.

Examiner

Charles Appiah

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/18/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. Claims 1-11 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,757,550. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations of the claims of the instant application are broad enough to be encompassed by the corresponding claims of the patent and as such it would have been obvious to one of ordinary skill in the art to implement the invention of the claims of the instant application using the claims of the patent.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by **Hess et al. (5,471,670)**.

Regarding claim 1, Hess discloses a mobile station (113-117), that selects one of a plurality of base stations(107-112), according to electric field strengths of signals transmitted on control channels corresponding to the plurality of base stations, and

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establishes first a link and then a call connection with the selected base station on a traffic channel that is assigned via a control channel corresponding to the selected base station (see col. 3, line 40 to col. 4, line 11), the mobile station comprising: a measuring means for measuring an electric field strength of a signal on the traffic channel when a link operation is performed to establish the link for the traffic channel (communication unit monitoring outbound link usabilities of the assigned resource and all potential handoff candidates by utilizing its processing unit, see col. 4, lines 25-31), and judging means for judging whether the link operation should be continued according to the measured electric field strength (communication unit determining whether the first communication resource's signal usability is favorable or unfavorable, see col. 6, lines 36-38). Hess further teaches that each path of the first communication resource may be a radio frequency (RF) channel in a FDMA system or a time slot in a TDMA system (see col. 5, lines 31-57) and that the alternate communication resource signal usability is most conveniently performed on TDMA systems and that the communication unit can carry out talk-out link signal quality measurements for all alternate communication resources in a limited number of TDMA frames (see col. 6, lines 13-33).

Regarding claim 2, Hess further discloses wherein when the measured electric field strength is not more than a predetermined value, the judging means judges that the link operation should be terminated (degradation of signal quality metric below predetermined threshold, or more generally, a degradation of the signal quality metric below a predetermined threshold for a predetermined continuous period of time, col. 6, line 38 to col. 7, line 1).

Regarding claim 3, Hess further discloses the mobile station newly selecting one of the plurality of base stations (see col. 7, lines 1-3) and requests the newly selected base station to assign a traffic channel if the judging means has judged that the link operation should be terminated (communication unit receiving an indication that the second communication resource's interference level is acceptable and the communication unit continuing the communication on the selected communication resource, see col. 9, lines 19-38).

Regarding claim 4, Hess shows wherein the measured electric field strength includes a signal level (talk-out signal strengths, col. 4, lines 50-61), and a noise level (acceptable interference level based on the predetermined signal usability threshold, col. 4, lines 61-67), the signal level being a reception signal when a signal is received from the selected base station, and the noise level being a reception signal level when no signal is received from the selected base station on the traffic channel (determination of interference levels of all unassigned communication resources by measuring the received talking signal strengths on the communication resources absent of communications, col. 11, lines 42-49), the judging means judges that the link operation should be terminated if the signal level is not more than a first threshold value or a difference between the signal level and the noise level is not more than a second threshold value (see col. 11, line 50 to col. 12, line 60).

Regarding claim 5, Hess further discloses wherein the mobile station newly selects one of the plurality of base stations and requests the newly selected base

station to assign a traffic channel if the judging means has judged that the link operation should be terminated (see col. 10, line 15 to col. 11, line 34).

Claim 6 is rejected for the same reasons as set forth in the rejections of claims 1-3 above.

Claim 7 is rejected for the same reasons as set forth in the rejection of claim 4.

Regarding claims 8 and 10, Hess discloses a base station (107-112) that assigns a traffic channel to a mobile station (113-117), and establishes first a link and then a call connection with the mobile station on the traffic channel (establishment of communication on a first communication resource supported by a broadcast by a communication unit, col. 9, lines 48-57), a measuring means for measuring an electric field strength of a signal on the traffic channel when a link operation is performed to establish a link for the traffic channel, see col. 9, line 57 to col. 10, line 14), and a judging means for judging whether the link operation should be continued according to the measured electric field strength (broadcast unit determining whether the signal usability of the first communication resource's talking link is unfavorable by measuring a signal quality metric of the talking link, col. 10, lines 15-40), a control means for terminating the link operation if a judgment result of the judging means is negative (see col. 11, lines 21-34). Hess further teaches that each path of the first communication resource may be a radio frequency (RF) channel in a FDMA system or a time slot in a TDMA system (see col. 5, lines 31-57) and that the alternate communication resource signal usability is most conveniently performed on TDMA systems and that the communication unit can carry out talk-out link signal quality

measurements for all alternate communication resources in a limited number of TDMA frames (see col. 6, lines 13-33).

Claims 9 and 11 are rejected for the same reasons as set forth in the rejection of claim 4 above.

4. Claims 8 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by **Kalliokulju (6,178,326)**.

Regarding claims 8 and 10 Kalliokulju discloses a base station that assigns a traffic channel to a mobile station and establish a first link and then a call connection with the mobile station on the traffic channel (see Fig. 1), comprising: a measuring means for measuring an electric field strength of a signal on the traffic channel when a link operation is performed to establish the link for the traffic channel (see col. 7, lines 47-55), and judging means for judging whether the link operation should be continued according to the measured electric field strength (see col. 7, lines 55-57), and control means for terminating the link if the judgment result of the judging means is negative (see col. 7, lines 55-59).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yoshio (JP 10-341472) discloses a method for switching base stations in a mobile communication system.

Blakeney, II et al. (5,267,261) discloses a mobile assisted soft handoff in a CDMA cellular communication system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Appiah whose telephone number is 703 305-4772. The examiner can normally be reached on M-F 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 703 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CA


CHARLES APPIAH
PRIMARY EXAMINER